Project Final Report
Peyton Creek Phase II
99-33

C9994861-99-33

Workplan number M-05116262

April 1, 2005 through December 31, 2005

Submitted by the
Kentucky Heritage RC&D Council, Inc.
227 Morris Drive
Harrodsburg, Kentucky 40330

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Acknowledgements

The Kentucky Heritage RC&D Council would like to acknowledge the following persons or agencies that helped in the design, execution, and administration of this project:

USDA-NRCS. Through the actions of the US Secretary of Agriculture, the Kentucky Heritage RC&D Area was authorized on April 1, 1992. This action enabled the USDA-Natural Resources Conservation Service to provide Federal assistance to the Kentucky Heritage RC&D Council to develop an Area Plan of Work. This plan continues to focus on the needs of local agricultural producers and their needs for technical and financial assistance. The support of the Natural Resources Conservation Service has enabled the Kentucky Heritage RC&D Council to obtain this special funding for producers within this watershed.

Kentucky Division of Conservation. The Division of Conservation has enabled the Kentucky Heritage RC&D Council to provide this service to local agricultural produces by administering the day to day billing and accountability of the project. Their assistance in providing timely payment to producers has been most beneficial.

Kentucky Division of Water. The Division of Water has the vision with which to help implement best management practices that will address water quality concerns across the state. Their vision and partnership with the US EPA has allowed the Kentucky Heritage RC&D Council the means to implement a project of this magnitude.

The Peyton Creek Watershed Project Oversight Committee. This group of local farmers, agency representatives and consultants has provided local guidance to project implementation. Their insight and assistance lead to the buy-in of local producers and ultimately, the total success of the project.

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Executive Summary

The Peyton Creek Phase II Watershed Project can be thought of as a supplemental funding project of Peyton Creek Watershed. The original Peyton Creek Watershed project (Grant Agreement # M-03098184, Grant Number C9994861-01-16) was funded for a total of $750,000 and runs from February 1, 2003 through September 30, 2008. $225,000 (Federal) was available for BMP installation. With the success and enthusiasm generated from that project, the BMP funds were quickly obligated, and the need for additional funds was sought. The Peyton Creek Phase II project allowed for an additional $169,900, with $76,130.41 (Federal) available for BMPs.

The overwhelming majority of producers in the Peyton Creek Watershed are full-time farmers whose sole family income is derived from agriculture. They do not earn supplemental income from part-time work. As such, the farmers in this watershed have limited funds available to address water quality issues. Rather, they try to get as much production from their land as is physically possible. Weaning lots are over crowded, cattle have free access to streams for shade and water, and there are no rotational grazing systems or cross-fencing – all of which leads to improper stocking rates, soil erosion, and water quality issues.

The goal of this project was to augment the original Peyton Creek Watershed project with additional BMP funds to keep producers interested and involved. The Project Oversight Committee decided that the best way to accomplish this was to offer most popular BMPs to producers at the start of the project. Producers remained interested and involved in the project. Some of the BMPs installed were animal waste storage facilities, stream crossing, heavy use areas, alternative water systems, and fencing.

The success of this project has lead to the funding of Phase III. This third and final phase should then fully address the original resource concerns of water quality in the Peyton Creek Watershed.

Introduction and Background

The overall goal of the Herrington Lake – Dix River Clean Water Action Plan is to reduce non-point source pollution and improve the bacterial and biological integrity of Herrington Lake and the streams within the Dix River watershed. Dix River was selected as one of five priority Clean Water Action Plan (CWAP) watershed through the Unified Watershed Assessment process in 1998 and is a "Category One-Watershed In Need of Restoration." (*1998, KDOW Clean Water Action Plan*)[5]. Dix River basin carries a 303(d) status of First Priority for non-support of primary contact recreation (swimming) and a 303(d) status of second priority for partial support of aquatic life. Herrington Lake, the water supply for the City of Danville, impounds the Dix River. Herrington Lake has been assessed as in non-support of aquatic life and a TMDL for nutrients is under development. (*1998 KY 303(d) List of Waters of KY*)[6] The Herrington Lake – Dix River CWAP addresses Herrington Lake and the upstream portion of the Dix River watershed.

Until the TMDL and TMDL Implementation Plan are completed and contributions from nonpoint sources are more clearly identified, efforts are being directed toward the demonstration of innovative and/or "hard to sell" Best Management Practices to the agricultural community. An agricultural BMP demonstration project was funded under the 1997 Nonpoint Source base 319(h) grant in two subwatersheds of the Dix River, Spears Creek and Mocks Branch (97-18), prior to initiation of the TMDL. A second agricultural BMP demonstration project in the Hanging Fork and Cane Run subwatersheds was funded under the 1999 incremental 319(h) grant (99-23). This current project will implement a watershed demonstration project focusing on agriculture in the Peyton Creek subwatershed.

When selecting a subwatershed for this project, size was an important consideration since it is more likely that results (analytical and social) can be quantified on a small watershed within the limited time frame of the project. The 3,883 acre Peyton Creek watershed was selected due to the concentration of farming operations and the water quality concerns related to the farming methods in use in the area. Due to depressed incomes, farmers in this area are trying to get as much production from their land as possible. For example, when a weaning lot is needed for their cattle, the obvious location is next to the creek, where water is plentiful, readily available, and easily accessible. The lot is generally overcrowded due to the farmer's continuing need to get as much from this land as is physically possible. Environmental problems within the Peyton Creek subwatershed that will to be addressed by this project include: cattle's free access to creeks; lack of fencing/rotational grazing systems; eroded crossings and feeding areas; lack of proper waste management; over grazing and improper stocking rates; poor pasture and hayland management; and soil erosion from cropping practices. Due to the economic distress of the local farming population, a higher cost share rate will be considered for the project area.

The objective of this project to improve water quality within the Peyton Creek watershed by installing BMPs that emphasize streamside protection, proper manure handling and

utilization, and conversion to rotational grazing systems. Once these BMPs have been in place and accepted, other producers are more apt to convert to more innovative conservation practices that are more economical, and environmentally friendly.

This project is helping farmers by offering them incentives to install demonstration BMPs through the 319(h) grant program, and employ a Watershed Coordinator to aid in implementing this project. Watershed meetings in partnership with DOW and DOC are held so farmers can tell us what types of BMPs would best suit their operations. New concepts, such as flash grazing and rental payments for riparian areas will be offered and showcased at field days. BMPs that reduce soil erosion such as riparian buffers and filter strips will be offered as well.

New and innovative solutions to the problems these farmers face each day are offered. The farmers know cattle should not have free access to streams and creeks. They know animal waste should not enter the creeks. They know soil erosion is detrimental to their farms and harmful to the environment. This project offers them a means of maintaining their livelihood in a way that is affordable and reasonable, and most of all, protects the water resources within Peyton Creek Watershed, and that of the state.

Materials and Methods

Peyton Creek Watershed (3883 acres) is located in Lincoln County and is a tributary of Hanging Fork, which is a portion of the Herrington Lake-Dix River Watershed, and a part of the Kentucky River Basin. The Dix River-Herrington Lake watershed (HUC 051002-05-170) includes the western edge of Garrard County, part of northern Lincoln County, and eastern portions of Boyle and Mercer Counties. The land is in the Bluegrass physiographic region, characterized by undulating terrain and moderate rated of both surface runoff and groundwater drainage. Most of the watershed lies above thick layers of easily dissolved limestone that form carbonate aquifers. Groundwater flows through channels in the limestone, so caves and springs are common in regions with this geology. Some areas lie above interbedded limestones and shales (>20% limestone)[1], allowing groundwater flow where clay content is low enough. Land in the watershed is almost 90% agricultural and almost 5% residential. The surface waters of the watershed supply the drinking water for the municipal systems of Lancaster and Danville. Livestock density is substantially higher than average for the Kentucky River basin. (2002, Kentucky River Basin Management Plan[2], http://www. uky.edu/WaterResources/Watershed/KRBMP/KRB_MP02.htm).

Water quality was improved in the Peyton Creek Watershed by installing BMPs that emphasize streamside protection, proper manure handling and utilization, and conversion to rotational grazing systems. The BMPs will also be demonstrated at a local field day in a similar project – Peyton Phase III.

BMPs will be installed in accordance with USDA-NRCS's standards and specifications[3], the Kentucky Agricultural Water Quality Act, and Forest Conservation Act as appropriate. The Watershed Coordinator and/or a NRCS representative oversees BMP installation.

Pasture and Hayland Seeding and Pipeline/Tank were the only two practices installed with funds from this project. Due to the over expenditure of 319 funds in one adjacent watershed, most funding for Peyton Creek Phase II (99-33) was moved to the 99-23 project.

A Watershed Coordinator assists with project implementation and administration. The Coordinator prepares invoices, project progress reports, and assists landowners with selection and installation of BMPs that addresses water quality issues within the Peyton Creek basin. The BMPs identified are those that the producers have determined they might need during meetings with the Watershed Coordinator, the Lincoln County Conservation District, the USDA-Natural Resources Conservation Service, and the Lincoln County Cooperative Extension Service.

Matching funds for the project were provided from two sources. The Lincoln County Conservation District provided matching personnel funds for the Watershed Coordinator position. Also, BMPs installed under the Kentucky Soil Erosion and Water Quality Cost Share Program (i.e. "state cost share program") were used as match.

This project does not have monitoring associated with it. Water quality monitoring is ongoing in Peyton Phases I and III, but was not a component of this project. A preliminary report developed for Phase I is attached along with the BMP Implementation Plan. A map of the watershed area is also included in the attached monitoring report.

Demonstration of installed BMPs to the public through news articles, field days, public meetings and personal tours are methods employed to show BMP technology. Many producers stop by and visit their neighbors who are happy to show the new BMPs they have recently installed. The producers come to local conservation offices to discuss how these BMPs may be applied on their farms. Public meetings include RC&D Council meetings, Conservation District Board meetings, Extension meetings where producers hear about progress on Section 319(h) projects.

News articles published by the RC&D Council discuss the Section 319(h) grant program and the benefits derived from the Peyton Creek projects.

A field day was not a component of Peyton Phase II, but one will be hosted in later years after more BMPs are established.

BMP Selection Process

This process was employed one time, but served for all three Peyton Creek Watershed projects (Phases I, II, and III.)

Once Section 319(h) funding was secure, the Watershed Coordinator and Project Oversight Committee notified all the producers within Peyton Creek Watershed of this funding opportunity that was available to them. For each producer that showed an interest in the project, a farm plan was developed by the Watershed Coordinator and Conservation Office. The farm plan showed the producer what types of BMPs were needed on this farm.

Sufficient funds were made available for BMP installation through the additional “phase” monies. All BMPs identified as needing to be installed should be adequately funded through Phase III.

Results and Discussion

As stated at the beginning of this report, this project was designed to keep producer interest up and provide additional funds for BMP installation. Due to confusion in 60:40 vs. 90:10 cost share matches, BMP funds were overspent in an adjoining watershed. Funds were transferred from 99-33 to 99-23 to pay for BMPs installed. Therefore, a limited number of BMPs were installed in this project. BMPs installed included pasture and hayland seeding, and pipeline-tank systems. Funds were also spent on personnel (watershed coordinator).

At the onset of the original Peyton Creek Watershed project (01-16), the Project Oversight Committee determined that it would be best to notify (by letter) all farmers within the watershed of this project. Based on the producer's response to these letters, participants were given farm plans showing what types of BMPs would best benefit their farms. With the acquisition of Peyton Phase II & III, it was determined that there would sufficient funding to adequately address the needs of all interested producers in the watershed. A scenario was devised by the Project Oversight Committee to select BMPs and priorities based on the farm's proximity to the main stream of Peyton Creek. Based on producer participation and anticipated funding levels, this system was not employed because it was not needed. –There were sufficient funds to cover anticipated needs.

BMPs were installed following the BMP Implementation Plan. The watershed coordinator assisted producers in design, layout, and construction of BMPs. The watershed coordinator lives in an adjoining watershed, and was well known and well respected within the Peyton Creek area. He had installed similar BMPs on his farm, and his knowledge and expertise were extremely well received.

An interim (fall '05) monitoring report entitled "Peyton Creek-Frog Branch Data Report: Pre-BMP Monitoring Analysis" is included with this Final Report. It is included with this report as Appendix B.

A field day will take place in the Peyton Creek Watershed once more BMPs have been installed. The field days serve as a crucial means of showing neighboring producers the effects of installed BMPs. Farmers talk to farmers, and soon the new ideas and concepts demonstrated at a field day are on the minds of producers around the area.

The Watershed Coordinator's role served to eliminate the need for NRCS personnel onsite. The Watershed Coordinator discussed the producers' needs with the producers, and kept the producers ever mindful of the BMPs they agreed to install in their farm plans. The Watershed Coordinator serves as a "bird-dog" and keeps the day to day activities of the project moving along.

The environmental impacts installed during the course of this project were quite minimal in that most of the BMP funds were transferred to the adjacent Hanging Fork 99-23 project.

Conclusions

This Peyton Creek Phase II Watershed project was funded at an opportune time. Producers were excited about the project and its funding provided us the mechanism to "keep the ball rolling." For many years producers in this area were aware of the environmental degradation their farming operations were causing. With the advent of this project, they saw a way out -and were provided the means with which they could do the right thing.

Our goal of reducing nonpoint source pollution was realized in this project – however small. BMPs were installed to NRCS specifications[3] following the plans laid out in the BMP Implementation Plan. Preliminary monitoring reports do not yet show a change in water quality, but we are confident those changes will occur with continued BMP implementation and monitoring.

Measures of Success

In our original Peyton Creek Phase II proposal, we stated that our "success will be measured by monitoring data showing an improvement in water quality." Monitoring was ongoing from Phase I, and with the movement of BMP funds, no real changes in water quality could be documented.

Lastly, a better system of tracking 319 funds and the assorted matches needs to be devised. This project allowed for the cost share rate to be changed from 60:40 to 90:10 since Lincoln County is classified as "distressed" based on Appalachian Regional Commission's calculations. As such, a producer submits his bills, plus local match from state cost share funds spent in Lincoln County. Where confusion arises is when 'X' amount is spent on BMPs, 'Y' amount must be deducted from the BMP column. Since 'Y' includes BMP expense PLUS state cost share match, we then only get reimbursed 'Z' which is 60% of 'Y'. For a long time we only deducted 'X' from our BMP 319 category, and were always running out of money.

Literature sited:

[1]USDA-NRCS. Field Office Technical Guide. United States Department of Agriculture. Natural Resources Conservation Service.

[2]Kentucky River Basin Management Plan. University of Kentucky, Lexington Kentucky. http://www.uky.edu/Water Resources/Watershed/KRBMP/KRB_MP02.htm.

[3]USDA-NRCS. Field Office Technical Guide Section IV. United States Department of Agriculture. Natural Resources Conservation Service.

[4]Nonpoint Source Project Final Report Guidelines. Kentucky Division of Water, Environmental and Public Protection Cabinet, Nonpoint Source Section.

[5]Environmental and Public Protection Cabinet; Department for Environmental Protection; Kentucky Division of Water; 1998, KDOW Clean Water Action Plan.

[6]Environmental and Public Protection Cabinet; Department for Environmental Protection; Kentucky Division of Water; 1998, KY 303(d) List of Waters of Kentucky.

Appendices

Appendix A – Financial and Administrative Closeout

Workplan Outputs

Below is a list of all outputs that were committed to for this project.

Milestone:

1) Submit all draft materials to Cabinet for review and approval.
2) Submit advance written notice on all workshops, demonstrations, and/or field days to the Cabinet.
3) Install BMPs 4/05-12/05
4) Upon request of the Division of Water, submit Annual Report and/or participate in the Cabinet sponsored biennial NPS Conference.
5) Submit three copies of the Final Report and submit three copies of all products produced by this project. 9/05 – 12/05

Budget Summary

Budget Categories (itemize all categories)	Section 319(h)	Non-Federal Match	TOTAL
Personnel	$10,000		$10,000.00
Supplies			
Equipment			
Travel			
Contractual **-BMPs** **-monitoring**	 76,130.41 15,869.59	 67,900	 144,030.41 15,869.59
Operating Costs			
Other			
TOTAL	**$102,000.00**	**$67,900.00**	**$169,900.00**
	60%	40%	**100** %

Budget Narrative

Detailed Budget:

Personnel costs are those associated with employing a Watershed Coordinator to be paid solely with 316 funds. Match will be made through state cost share program, and will not be required by the vendor.

Contractual BMPs are the costs associated with installing BMPs on the ground. Most of the non-federal match will come from state cost share program. Producers will be required to match 10% of the cost of the BMP.

Contractual Monitoring costs will be paid solely with 319 funds. Match will be made through state cost share program, and will not be required by the vendor.

Revised Detail Budget

	319	match	TOTAL
Personnel	10,000.00		10,000.00
BMPs	58,689.99	36,373.05	65,063.04
Monitoring	15,869.59		15,869.59
TOTAL	54,559.58	36,373.05	90,932.63

Division of Water approved this budget revision to help facilitate the budget deficit of 99-23 project adjoining this watershed.

Personnel costs are those associated with the Watershed Coordinator who assists farmers and agency staff in installing BMPs.

BMPs are those funds associated with the cost of Best Management Practices being installed on producer's farms. $47,440.42 has been revoked from this category and placed in the Hanging Fork 99-23 BMP category.

Monitoring costs are those associated with documenting changes in water quality due to the environmental effects of this project.

Kentucky Heritage RC&D Council, Inc. was reimbursed $ 90,832.64. A total of $99.99 federal funds remain unspent. Excess project funds were not spent for fear of overspending.

Equipment Summary

No equipment was purchased in this project.

Special Grant Conditions

No grant conditions were placed on this project.

Appendix B – QAPP for Water Monitoring

No Water quality monitoring was required for this project, however an interim (Fall 2005) monitoring report entitled “Peyton Creek – Frog Branch Data Report: Pre-BMP Monitoring Analysis” for the Peyton Creek Watershed (Phase I) is attached.

Appendix C – BMP Implementation Plan

Below is an approved copy of the BMP Implementation Plan.

Peyton Creek Watershed
BMP Implementation Plan
01-16

List of eligible BMPs:
Cost share rate: 90:10

A list of eligible BMPs and items eligible for cost share follows:

NRCS Practice Name	NRCS Practice Code
Critical Area Planting	342
Diversion	362
Fence	382
Filter Strip	393
Grassed Waterway	412
Heavy Use Area Protection	561
Livestock Exclusion	472
Livestock Shade Structure	717
Nutrient Management	590
Pasture and Hayland Planting	512
Pipeline	516
Pond	378
Prescribed Grazing	528A
Riparian Forest Buffer	391A
Roof Runoff Management	558
Sinkhole Protection	725
Spring Development	574
Streambank and Shoreline Protection	580
Stream Crossing	576
Tank	614
Tree/Shrub Establishment	612
Waste Management System	312
Waste Storage Facility	313
Waste Treatment Lagoon	359
Waste Utilization	633
Well	642

Other items eligible for funding:

Pumps, for transmission of water from ponds, wells, springs or streams to troughs or watering devices.
Ponds, must be fenced with a trough, or fenced with limited access area.
Chargers, for electrical fencing.
Extension of electrical service for water pumps.
Flash grazing.
Water meters for municipal water sources.
Moving feeding areas away from creek.
Rental payment for riparian areas.

In some instances, greater definition of practices is required for this project than what is available in the FOTG. The following is a list of clarifications to BMP practices as they relate to this project.

Flash Grazing. Flash grazing in riparian areas can occur during two periods in the spring and fall. The specific dates are May 1 through May 15, and October 1 through October 15.

Prescribed Grazing. Incentive payments for prescribed grazing practices shall be $15 per acre per year for three years.

Rental Payments for Riparian Areas. Producers who participate in this practice will receive $100 per acre per year.

Heavy Use Area Protection. This practice shall be used in only the following areas: gateways, walkways, around tanks, and feeding areas.

Pasture and Hayland Planting. This practice shall include the requirement that reestablishment shall not exceed 30% of the farm.

Permanent Fencing. Permanent fencing is defined as barbed wire, woven wire, or high tensile wire. If high tensile wire is used, two strands must be energized.

Fencing. For the purpose of this project, fencing of riparian areas will follow EQIP guidelines. In addition, in situations where fencing setbacks result in areas unusable to the producer, the Watershed Coordinator can expand the setback to the best use of the producer.

Description of the BMP selection process:

Best Management Practices (BMPs) and technologies selected by the Watershed Coordinator are oriented around reducing pathogens, nutrients, and sediment. The efforts will be centered primarily around encouraging the adoption of rotational grazing systems, the development of alternative water supplies or providing limited stream access to cattle,

and the construction of well designed and sited animal feeding/waste storage areas. Other BMPs that address the target pollutants will be eligible for systems other than rotational grazing. Since this is a technology based demonstration project with primarily educational objectives, at least one farm needing several of the referenced BMPs will be identified to facilitate demonstration of the BMPs by conducting a field day. BMPs will be selected that meet the needs of the operation while providing the best resource protection.

Relative Treatment Efficiency of BMPs

The focus of this project is on the adoption of demonstration BMPs that will educate producers on technologies available in protecting water quality. Emphasis will be on the adoption of a management system rather than individual BMPs; therefore, comparison of treatment efficiencies of individual BMPs is not needed.

Operation and Maintenance

The project will complement other state and federal funding programs in the watershed. Operation and maintenance agreements are required for both EQIP and State Cost Share funding. These agreements will be adopted for BMPs and eligible cost share items, as appropriate, funded by 319(h). BMPs must be maintained for the life of the project. The closing date of this project is September 30, 2008.

Description of BMP Targeting Process

Targeting of BMPs will be based on producer interest. Selection of farms for BMP implementation will be selected based on the following priority factors:

1. Conservation needs identified by the Watershed Coordinator in order to improve water quality, meet the needs, and receive the cooperation from the participating farmer.

2. The ensuing educational benefits that can be realized through educational tours and on farm field days.

3. Cost share contributions from other programs (EQIP, State Cost Share, CRP).

4. Length or percentage of stream protected from unrestricted livestock access (higher percentages and greater lengths are higher priority).

5. Overall cost of BMPs for rotational grazing systems per stream mile protected.

This project complements other federal funding programs under which specific BMP locations are protected under the Freedom of Information Act. Therefore, the cooperating Conservation District will maintain the specific location of BMPs. Specific

location information for BMPs funded by this project, matching State Cost Share funds, and/or other funding programs (as appropriate) will be provided to DOC, at a minimum, by 14 digit HUC.

Financial Plan of Action:

Peyton Creek Watershed is made up primarily of full-time farmers whose sole family income is derived from agriculture, and who do not earn supplemental income assistance from a second part-time job. As such, the farmers in this watershed have limited funds available to address water quality issues. Rather, they try to get as much production from their land as is physically possible. Weaning lots are over crowded, cattle have free access to creeks for shade and water, and there are no rotational grazing systems or cross-fencing leading to improper stocking rates and soil erosion.

This project will assist these farmers by offering them incentives to install demonstration BMPs. New concepts will be offered and showcased at field days. The 60:40 cost share rate will be adjusted to 90:10 due to the low per capita income of residents from within this project area. This will be accomplished by using "local match" from other state cost share projects, and applying it to the match of producers in Peyton Creek Watershed.

Existing state and federal programs will be utilized to the maximum extent possible with most of these paying 75% of the cost of the BMPs. Funds for this project will primarily be used to provide cost share for practices not covered by existing programs, or producers' inability to participate.

Restrictions:

- Size of ponds will be based on reasonable livestock watering needs. Additional costs associated with larger pond capacity will be borne by the producer.

- Any BMP or system considered for funding under this program must be reviewed for the potential to improve water quality. BMPs or systems that are primarily for improving production or efficiency of the producer's operation will not be eligible for funding.

- Costs for alternative water supplies are only eligible if livestock are excluded from streams or other water bodies.

State Cost Share BMPs used as match:

Water Quality BMPs used as match and funded via the Kentucky Soil Erosion and Water Quality Cost Share Program will be installed per the current *"Kentucky Soil Erosion and Water Quality Cost-Share Program Manual."* The manual, which cites

the regulation KRS 146.110-121, states the intent of the cost-share program, and describes the eligibility process, application process, selection criteria, operation and maintenance requirements, etc. These BMPs will be demonstrated in accordance with guidance provided by the Division of Conservation.

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BMP Implementation Plan
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Relative Treatment Efficiency of BMPs

The focus of this project is on the adoption of demonstration BMPs that will educate producers on technologies available in protecting water quality. Emphasis will be on the adoption of a management system rather than individual BMPs; therefore, comparison of treatment efficiencies of individual BMPs is not needed.

Operation and Maintenance

The project will complement other state and federal funding programs in the watershed. Operation and maintenance agreements are required for both EQIP and State Cost Share funding. These agreements will be adopted for BMPs and eligible cost share items, as appropriate, funded by 319(h). BMPs must be maintained for the life of the project. The closing date of this project is September 30, 2008.

Description of BMP Targeting Process

Targeting of BMPs will be based on producer interest. Selection of farms for BMP implementation will be selected based on the following priority factors:

1. Conservation needs identified by the Watershed Coordinator in order to improve water quality, meet the needs, and receive the cooperation from the participating farmer.

2. The ensuing educational benefits that can be realized through educational tours and on farm field days.

3. Cost share contributions from other programs (EQIP, State Cost Share, CRP).

4. Length or percentage of stream protected from unrestricted livestock access (higher percentages and greater lengths are higher priority).

5. Overall cost of BMPs for rotational grazing systems per stream mile protected.

This project complements other federal funding programs under which specific BMP locations are protected under the Freedom of Information Act. Therefore, the cooperating Conservation District will maintain the specific location of BMPs. Specific location information for BMPs funded by this project, matching State Cost Share funds, and/or other funding programs (as appropriate) will be provided to DOC, at a minimum, by 14 digit HUC.

Financial Plan of Action:

Peyton Creek Watershed is made up primarily of full-time farmers whose sole family income is derived from agriculture, and who do not earn supplemental income assistance from a second part-time job. As such, the farmers in this watershed have limited funds available to address water quality issues. Rather, they try to get as much production from their land as is physically possible. Weaning lots are over crowded, cattle have free access to creeks for shade and water, there are no rotational grazing systems or cross-fencing leading to improper stocking rates and soil erosion.

This project will assist these farmers by offering them incentives to install demonstration BMPs. New concepts will be offered and showcased at field days. The 60:40 cost share rate will be adjusted to 90:10 due to the low per capita income of residents from within this project area. This will be accomplished by using "local match" from other state cost share projects, and applying it to the match of producers in Peyton Creek Watershed.

Existing state and federal programs will be utilized to the maximum extent possible with most of these paying 75% of the cost of the BMPs. Funds for this project will primarily be used to provide cost share for practices not covered by existing programs, or producers' inability to participate.

Restrictions:

- Size of ponds will be based on reasonable livestock watering needs. Additional costs associated with larger pond capacity will be borne by the producer.

- Any BMP or system considered for funding under this program must be reviewed for the potential to improve water quality. BMPs or systems that are primarily for improving production or efficiency of the producer's operation will not be eligible for funding.

- Costs for alternative water supplies are only eligible if livestock are excluded from streams or other water bodies.

State Cost Share BMPs used as match:

Water Quality BMPs used as match and funded via the Kentucky Soil Erosion and Water Quality Cost Share Program will be installed per the current *"Kentucky Soil Erosion and Water Quality Cost-Share Program Manual."* The manual, which cites the regulation
KRS 146.110-121, states the intent of the cost-share program, and describes the eligibility process, application process, selection criteria, operation and maintenance requirements, etc. These BMPs will be demonstrated in accordance with guidance provided by the Division of Conservation.